
Nudge and Tax in an Environmental Public Goods Experiment: Does Environmental Sensitivity Matter?

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Abstract

We provide an experimental test of the theoretical predictions obtained in Ouvrard and Spaeter (2016). A public goods experiment is proposed in which the subjects can contribute to reduce the level of pollution, which is stochastic. A nudge (announcement of the socially optimal contribution) and a tax are implemented to improve the level of contributions. The environmental sensitivity and optimism of the subjects are also elicited. Our first result shows that the implementation of the nudge does not perform as well as the implementation of the tax. The reaction to the nudge depends directly on individuals' environmental sensitivity, contrary to the reaction to the tax. Secondly, the nudge performs well with highly sensitive subjects only during the first half of its implementation. Lastly, the efficiency analysis shows that the implementation of the nudge significantly decreases the groups' welfare for the least sensitive subjects, in comparison to the baseline. In sum, these results tend to corroborate the predictions obtained in Ouvrard and Spaeter (2016).

Keywords: incentives, nudge, environmental sensitivity, optimism, tax

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